P. IRELAND

M&T NEWS

For many years the mainstay of the Sheffield - Rotherham service, the Rotherham C.T.D. Crossleys have now almost all disappeared. No. 205 is here seen in Corporation Street in trolleybus days.

The Monthly Magazine of . . .

SHEFFIELD OMNIBUS ENTHUSIASTS SOCIETY

M. & T. NEWS

September 1968 No.46

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SOCIETY NEWS

OCTOBER TOUR Full details are enclosed of next months tour to .We are asking only a very low fare for this - the tour almost certainly running at a loss,but will be subsidised by some of the return on our sales of model trolleybuses.Very many of our members have never yet been on a Society tour - please do not let us down this time,but come along for a really enjoyable run.

SALES DEPARTMENT. No news this month,save that attempts are being made to sell photographs in bulk to various concerns.The revised sales list is enclosed with this issue.

S.O.E.S. MODEL TROLLEYBUS SYSTEMS As promised last month full details are enclosed of how YOU can help in the production of our models - which have proved extremely successful.Do help us - you will enjoy painting the small trolleybuses,and in return be able to enjoy all our activities at very little (or no) cost.I look forward to hearing from every member,and to sending everyone a sample bus to paint.

D.E.Vickers

EDITOR'S NOTE News has only been received from four members this month which is a disappointment after the large amount received over the last few months.One or two fleet lists will be ready for publication within the next 2-3 months.These include S.U.T.,Wallace Arnold,Hanson & S.Ledgard.In each case a complete fleet history os given containing all known vehicles operated - further details will appear shortly.The Sheffield Transport Department fleet history should be available towards the end of this month,and members are asked to place their orders now to me to avoid disappointment.It contains all details of vehicles operated from 1914 up to the present day and costs only 4/6d(postage paid).

R.Banks

FLEET NEWS

SHEFFIELD TRANSPORT DEPARTMENT The remainder of the dual-entrance Swifts are now in service from Greenland (18 is still at AEC and WILL be at Earls Court).Also in service are the 'B' fleet PDR's 1101-16.(1101 entered service 2 weeks after the others through being fitted with automatic transmission).1101-8 are at Herries,and 1109-16 at EB.Known chassis numbers are 1104/7-16 - 800167/82-5/ 204-6/67-9 and have reconditioned PDR1/1 chassis.1109-16 entered service on 2/9/68 at the following times: /at 0611
1109 on 4/20 at 0556 1110 on 22/20 at 0509 1111 on 7/20
1112 on 19/20 @ 0512 1113 on 1/20 at 0536
1114 on 20/20 @ 0522 1115 on 6/20 at 0602
1116 on 30/20 at 0620 (/20 covers routes 20,33 & 75)

Due to an oversight at Park Royal a piece of underfloor panelling had been omitted.Someone was sent to rectify this and EB buses were treated first viz:1110/3 on 31/8/68,1109/ 12 on 1/9/68,1114/6 on 2/9/68,1111/5 on 3/9/68.

It was quickly discovered that these buses were 'high-geared,and 1116 had to be changed over on its first day out because it would not pull off on Derbyshire Lane when carrying 8 passengers.Thus a directive was sent to garages to only allocate these buses to'flatter' services.Thus the Herries ones are mainly on svc.57 - those at EB vary among the 'B' services.They are slightly higher than other buses (14ft.5½ins) and thus will not pass under the following bridges - N.Anston,Darfield,Dronfield*,Sheepbridge Station,Waleswood.The U.W. is 8-18-0 and the microphone is not yet fitted.The blinds are as on Swifts 1019-29 which are a blind specially designed for future one-man-operation.

The first two dual-entrance Atlanteans have also arrived.192 came on Tues 17/9/68,and over the week has been used by the Transport Committee,and has been on exhibition in Central Bus Station.A fuller description of these vehicles will appear next month.195 had appeared in Central Works on 21/9/68,and 193 is to appear at Earls Court show.Photographs of 192 have appeared in the local press,and quite a fuss is being made of these unusual buses.

The motorway coach 3001 returned to Leyland without being used,but is again back in Sheffield.Conflicting views have been heard about this bus,but it appeared it has only dual-purpose seating,and carries a good deal of blue paintwork.Before the motorway is opened the four motorway coaches are to be used on Derbyshire services 40/84.

192-221 are to be allocated to Herries,and the first few as soon as they arrive are to be used on svcs.10 and 49 to get passengers used to the new layout(for when these svcs.go O.M.O.).They will dispalce 1959 Atlanteans which will be transferred to EB,which in turn will replace old AEC's.As more are delivered the old 2189 series of AEC's at Herries will also be withdrawn.Only 388 of the 384-94 series of Leylands at Herries now remains in service.This has meant the withdrawl of the last buses carrying the old 'Roe' body livery of blue window surrounds - these were 386 and 390.

GARAGE CHANGES

832-4 From Hr to Gl 1398-1401 From EB to Ld(often seen on routes 12/512 displacing Fleetlines),814 From EB to Ld, 1261/2 From EB to Hr.1263 From EB to Ld,1274 From EB to Ld.

BLUE WHEELS

104/89,266/70,351/3,438/57/8/9/64/7/74/96,502,904/34,1251/75,3075/9/80

REPAINTS 102/13,346

Last month's news was rather premature,1011 has still NOT re-entered service as OMO.3078/9 were returned converted to EB on 30/8/68 though the former will be called in for repaint in October.The only outstanding s.d.'s on the conversion programme are 1006-9,3075/6.

About the end of June the use of fleet letters was discontinued,and these have disappeared on all repaints and new buses.Also the coat-of-arms is now being ommitted from the off-side through a directive sent to Central Works.

TICKETS With the end of the purple 4d's in sight remaining stocks were moved to EB and Gl was sent old red 2d's.Hence Gl conductors now carry 1d,2d,3d,5d,6d and Elderly Persons Ultimates.This has caused some alteration in ticket issue(to continue the system whereby no.of passengers may be calculated) viz:

Fare	Old Issue	New Issue
2d	2 x 1d(D)	1 x 2d
4d	1 X 4d	2 x 2d(D)
8d	2 x 4d(D)	1 x 2d,1 x 6d
1/2d	2 x 6d,2 x 1d(D)	2 x 6d,1 x 2d

(D) - denotes double issue,recorded by machine as one ticket.

On rte.23 one night for a 10d fare 2 x 2d(D) and 1 x 6d tickets were issued in place of 2 x 5d(D) tickets.

ROUTE CHANGES Commencing 9/9/68 all traffic which turned right from Fitzalan Square into High Street must turn

left up High Street,round the Castle Square round-a-bout returning down High Street.Also from 8/9/68 Howard Street was closed,and rtes.44/47/139 directed to run into CBS via outward route(High Street,Commercial Street,Sheaf St.)

Commencing 15/9/68 the changes on svcs.17/59/61/3 at last came into force(being held over since July).Timing changes also came into force on 1/24,27/30/105,36,83,86 (all every day),28,60(Sats),42/53,81/82(Mon-Fri).Also Svc.8/9 on Saturdays are operated from Ld.(Sun to Fri from EB).Rte.22 now runs via Bocking Lane,Greenhill Ave., Greenhill Main Road to Bradway and Holmesfield.

Rte.122 (a new route,but mainly at rush hours) runs via serive 22 to Bradway and then to Bradway Bank.

As Ld.buses do not have 'Wordsworth Av.' on the blinds the northern terminus of rte.17 is now shown as 'Parson Cross'.The Greenland Swifts are now allocated to svcs. 13/14(Wisewood),and svc.174 has been transferred to Ld. (274 remaining at EB).

OBSERVATIONS 1284 on 19,19/8/68;6 on 35,24 on 469,1019 on 37 all 21/8/68;1007/16 on 75 22/8/68;1009 on 82,340 on 97, 365 on 95,267 on 3,15 on 469 all 23/8/68;1295 on 51 24/8/68; 1336 on 17,353 on 28,1012 on 32,865 on 71,1372 on 97 all 26/8/68;1260 on 1,3160 on 65,1007 on 73 all 27/8/68,1020 on 75 28/8/68,1008 on 20 29/8/68;862 on 67,917,1016 on 28 30/8/68;1015 on 72 31/8/68;1115 on 72,1114 on 33,15 on 85 all 3/9/68;1019/23/9 on 28,3078-80 on 43,862/9 on 51,1103 on 82 all 5/9/68;1110 on 15,1111 on 72,1113 on 85,1115 on 67,1270 on 28 all 9/9/68;973 on 43,1745 on 52,1284 on 274 all 10/9/68,26(all day) on 71 11/9/68;112 on 50 12/9/68; 1109 on 506 13/9/68.

The following non-EB buses have been seen in EB viz: 1350 on 24/8/68,351 on 27/8/68,989 on 31/8/68

WITHDRAWLS

31/8/68 : 12,387/9/90/4,724/33,1776(rte.27 accident victim seen in Ld 25/8/68)

16/9/68 : 386

The following withdrawls are expected : 24/9/68,735, 30/9/68 727/31, 31/12/68 730.

Correction : Sykes has 2193 not 2183 which is still in service.

We would like to thank Mr.W.Craven,an STD employee for much of the news about Atlanteans and withdrawls.

R.Banks P.Ireland D.Tummon E.Wilson P.Beardsley.

MUNICIPALITIES,BET,BTC FLEET NEWS - R.Banks,D.Tummon, E.Wilson,P.Beardsley

SHEFFIELD UNITED TOURS 376 is no longer the team coach. 350 had been repainted in blue livery in the new style, but it still has a normal tours destination blind and no modifications appear to have been made.Ribble 637 was in the depot on 5/9/68.

DONCASTER The Tiger Cubs were not in service by September and much trouble was being experienced over the licencing of these.It was thought that it would probably be near the end of the year before they enter service as the finance committee say they must not enter service until the Regent III's are withdrawn in December.

MEXBOROUGH & SWINTON XWX was withdrawn and sold to Boddy,Bridlington on 7/68

LEEDS 654 was withdrawn in 7/68 after accident damage

The new Park Royal H78F Atlanteans are registered PNW 356-70G with fleet nos. 356-70 (356-62 have chassis nos.801860/1/910-3/45).

YORKSHIRE TRACTION Withdrawn 7/68 are 401/2,689/91/769-81

MANSFIELD DISTRICT/MIDLAND GENERAL In 7/68 Mansfield District transferred 534/42-4 to Midland General

LLANDUDNO Two Dennis(?) single deckers with Perkins engines are on order to replace the Fodens.Unfortunately all buses are to be repainted in blue and cream as used on the Gt. Orme cable cars.

DOUGLAS,I.o.M. The 1935 convertable horse-trams (the last built in the world) known as "tomato-boxes" are now permanently enclosed since the mechanism to open the side shutters is corroded.All the utilities are still in service.

MIDLAND RED All classes prior to D7,C5(except CL2 and CL3) and S14 are now extinct except as service vehicles. At Stafford depot the coach referred to in the March article is LC7.The last D5B's and LD8's plus a few only D7's have been replaced here by DD12's and pre S14's and early S14's by new S17's.Some S17's are now OMO,and the number indicator is painted out

BLACKPOOL No.7 was missed out of the fleet list.It is ex.270 (EFV 270) which is a training vehicle.

PORTSMOUTH 12 AEC Swifts/Marshall B42D + 16 are on order and are the first AEC's since a Regent (no.35) was bought in 1931. Route workings:

1/2 - PDR	3/4 - PDR,PD2/10	5/6 - PSRC,L1
7/8 - PSUC,L1,PSRC	9/10 - L1	11/12 - PSRC,PD2"12
13/14- PSUC	15/16 - L1,PSRC	17/18 - PSRC,L1

19/20 - PDR/PD2/40,PD3 19/20(Sun)- L1 or PSUC
22 - L1 23/24 - L1 23/24(Sun) - PSUC
143 - PDR 145 - PD2/12 145(evenings) - L1
148/148A/148B - PDR

SOUTHAMPTON New are 101/3/5-7 OCR 145/7/9-51F Leyland PDR1/1 East Lancs H76F

On order are 4 AEC Swifts and 16 Atlanteans all with East Lancs bodies.

SOUTHDOWN New are:
233/7/40-2/5 KUF 233/7/4L-2/5F Bristol RESL6G
RESL1/211/7/20-2/5 Marshall B45F
1247 LCD 247F Leyland PSU3/3RT 800749 Plaxton C49F

TRAM SECTION - D.Tummon

EASTBOURNE Double-decker 8 is completed.It is the same size as no.2 but has enclosed vestibules plus a praiseworthy advert.It has not yet been used on public service,only on private hire.

CRICH Prague 180 arrived on 30/8/68 in time for the extravaganza.A double track terminus has been laid at Wakebridge.

Grimsby and Immingham 26(ex.Gateshead 10) arrived at Consett and joined Sheffield 342 on 9/2/68 from Clay Cross.

The last relic of Sheffield trams has disappeared with the removal of the reserved tram track in Angel St.

SCOTTISH SECTION

A.1.Services,ARDROSSAN
(Docherty) FKG 87E Bedford VAS1 7828969 Duple C29F
Ex.Begg,Thornaby 6/68

DUNDEE New are: /H78F
296-305 GYJ 396-405G Daimler CRG6LX 62566-75 Alexander

EDINBURGH 223-5 have chassis numbers 455138/623/4029

GARELOCHHEAD COACH SERVICES RUF 74 is a PSUc1/2 and is numbered 68,and YVA 339 is no.72.62-4 have chassis nos. 453248/2636/3150 and are named as follows:
62 - Loch Lomond 63 - Loch Katrine 64 - Loch Lubnaig

IRVINE,Salsburgh New are :
NVD 869/70F AEC Reliance 6MU3R7079/80 Duple C51F

INDEPENDENTS SECTION - R.Banks,E.Wilson, P.Beardsley, D.Tummon.

ISLE OF MAN ROAD SERVICES The only PS1 in use is no.34 as a rest room at Douglas.A new version of the livery has been introduced - red mudgards and beading to the cream bands instead of black.The fleet name is simply

"Road Services" in varying styles instead of the full title.Weymann Orions have only one cream band.Ex.Aldershot Falcon 26 is still in cream and green with fleetnames and lettering painted out in red and Road Services transfers superimposed,

GREYHOUND CCN 171 is being converted to a towing vehicle. This is being done by removing the upper deck and platform (as was done with STD 666 to produce G56).

WEST RIDING New are 32-4 NHL 532-4F Leyland PSUR1/? 801523-5 Plaxton DP49F.These are for use on motorway services.

NEW OPERATOR - - D.C.Mosselwhite,24,Farm Walk,Mosborough.

BADDELEY,Holmfirth	89	760 JUB	Bedford SB5	93051
Duple C41F		Destroyed by fire 7/68		
BARKER,Eckington		VVC 123	AEC Reliance	MU3RV1576
Duple C41F		Ex.Brooksbank,Featherstone 7/68		
BEEHIVE,Adwick		VWX 848F	Bedford VAM70	58753
Plaxton C45F		New 7/68		
BILLIES,Mexborough		779 DYG	Bedford VAL14	1023
Duple C52F		Sold 7/68		
BINGLEY,Kinsley		BNW 641C	Bedford VAL14	1749
Plaxton C52F		Ex.Wallace Arnold,Leeds 7/68		
BOOTH AND FISHER		TUH 14	Albion NS3N	82055H
Harrington B30F		Ex.Smith,March 7/68		
BYNG,Portsmouth		JRV 500F	AEC Reliance	6MU3R7091
Duple C51F		New 4/68		
		JRV 502F	Bristol LH6L	68/106
Plaxton C45F		New 5/68		
		JRV 503F	AEC Reliance	6MU3R7095
Plaxton C51F		New 5/68		
		JRV 504F	AEC Reliance	6MU3R7090
Plaxton C51F		New 5/68		
FELIX,Hatfield	48	UWT 355F	AEC Reliance	6U32R7051
Plaxton DP51F		New 7/68		
IDEAL(WRAY)Hoyle Mill		UNN 109	Leyland PD2/20	556394
Metro-Cammell L59R		Ex.East Midland D109 7/68		
LONGSTAFF,Mirfield		EWY 924C	Bedford VAS1	1915
Duple C29F		Sold 7/68		
MOSSELWHITE,Mosborough		4499 WU	Bedford SB1	78097
Plaxton C41F		Ex.Naden,Macclesfield 7/68		
PEPPER,Thurnscoe		665 EWR	Bedford VAL14	1100
Plaxton C52F		Sold 7/68		
		YFU 999	AEC Reliance	2MU3RU3675
Plaxton C41F		To Stapleford,Markfield 7/68		

RILEY,Rotherham	KET 980F	Bedford VAM70	7860010
Plaxton C45F	New 7/68		
ROWE,Cudworth	6760 ET	Bedford SB3	94672
Duple C41F	Sold 7/68		
STORE,Stainforth	AWT 351B	Bedford VAL14	1259
Duple C52F	Sold 7/68		
WHITELEY,Maltby	KRW 465E	Bedford VAS5	7850413
Duple C29F	Ex.Shaw,Coventry 7/68		
WIGMORE,Dinnington	DWW 838B	Bedford VAL14	1554
Willowbrook B56F	Sold 7/68		
WILSON,Stainforth	WWR 726G	Bedford VAS5	454017
Plaxton C29F	New 7/68		

COMMERCIAL MOTOR SHOW - SOME EXHIBITS

PLAXTON 49 seater Panorama Elite body on Leopard chassis - Ribble
49 seater " " " " " " "37ft Bedford VAL
DUPLE 44 seater Commander Mk.IV on Reliance chassis
ALEXANDER 42 seater on Bristol REMH Chassis
E.C.W. 50 seater on Bristol NRL/LH double-deck chassis - Ribble
45 seater on Bristol LH chassis - Eastern Counties (OMO fitted)
N.C.M.E. 85 seater on Daimler CR-36 double-deck chassis - Walsall (Daimler stand)
1 double-deck front entrance,centre exit on Atlantean chassis for both Wigan and Nottingham /entrance
PARK ROYAL 79 seater on Atlantean chassis - STD(dual
79 seater on Atlantean chassis - Plymouth dual entrance - Leyland stand
79 seater on Atlantean chassis - Demonstrator dual entrance - demonstration park
ROE 78 seater on 33ft.Fleetline chassis - Leeds (one also on Daimler stand)
MARSHALL 48 seater on Panther chassis - Northern General
M.C.W. 47 seater on Panther chassis - Liverpool (with Mk.IV and dual entrance)
25 seater plus 48 standing Merlin chassis - LTB
PENNINE 34 seater plus 36 standing Bristol RELL chassis - Reading dual entrance
WILLOWBROOK 45 seater on Fleetline chassis - Halifax
DUPLE(M) 54 seater on Ford R226 chassis - Wolverhampton dual entrance

BUSES IN THE PERTH AREA - P.Hanwell

Perth,with a population of 41,000,is one of Scotland's larger cities and thus requires a fairly extensive system of bus services.There are five operators running regularly into and in Perth,these being the three Alexanders - Fife, Midland and Northern,Eastern Scottish and the independent A & C McLennan.

The town services are all provided by Alexander(Midland) whose blue and white buses work from the depot in Riggs Road,just off the main Glasgow Road.All the double-deckers at Perth depot are Bristol Lodekkas,mostly with rear entrance,which replaced a fleet of ex-London Guys in 1962/3 Single deckers include Leyland Tiger PS1's,Tiger Cubs and Leopards;AEC Reliances and Monocoaches;and Albion Vikings all with Alexander bodywork.

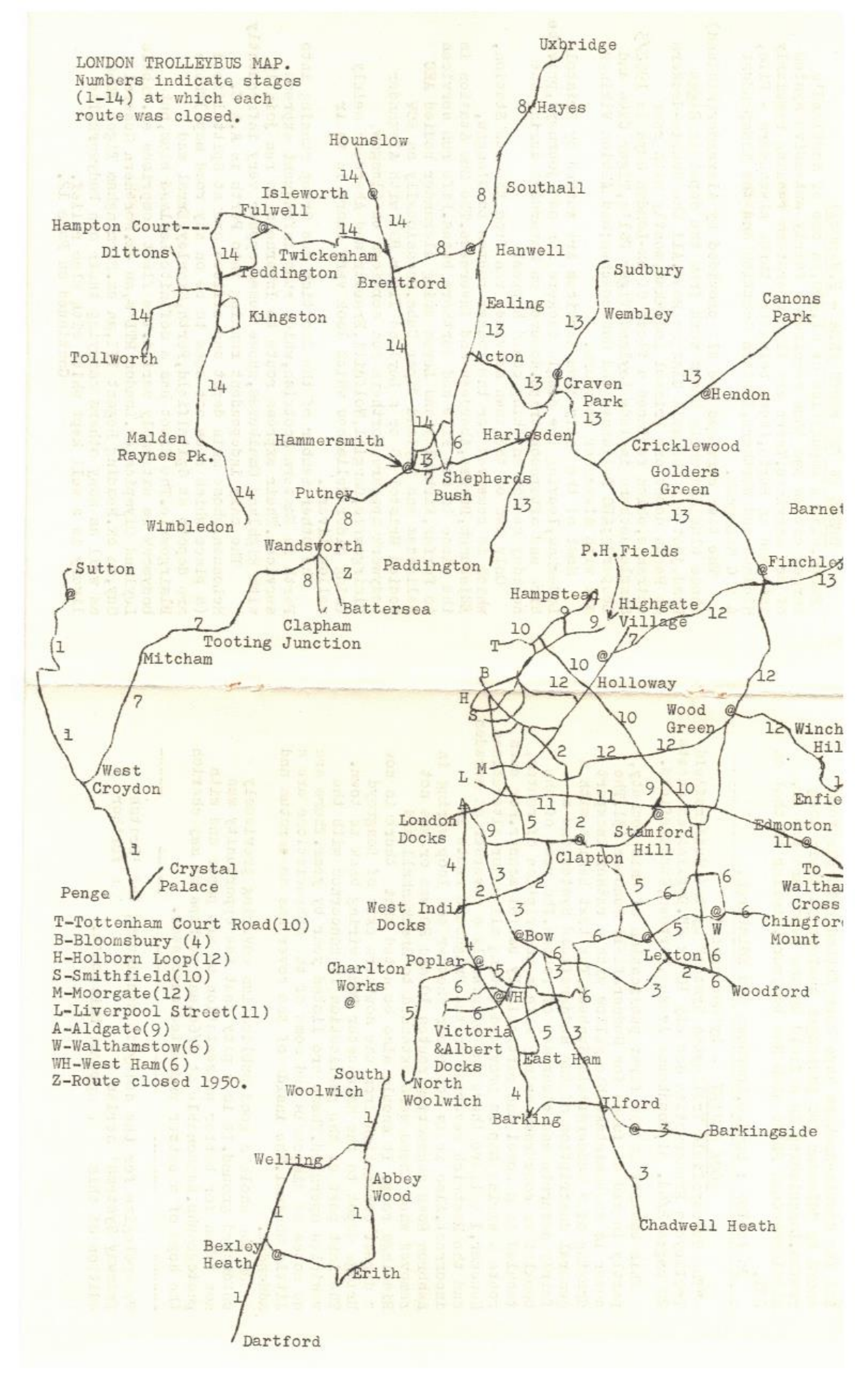
Most of the daily town services are worked by Bristol Lodekkas,leaving the single deckers for odd journeys,private hire and afternoon trips.However on Saturdays during the holiday season anything could happen!

Only two of the town services run from the Bus Station, which is reserved for the longer routes to Glasgow, Edinburgh,Dundee,Aberdeen and Inverness.The Bus Station is the place to see Fife and Northern buses.Fife run services to Forfar,Kirkcaldy and Leven using Alexander bodied AEC Reliances and Leyland Tiger Cubs.Occasionally an ECW bodied Bristol LS or a Leyland Tiger PS1 with Alexander bodywork appears.Northern run services to Glasgow, Blairgowrie,Cargill,Wolfhill,Braemar and Aberdeen mainly using older Reliances which look very smart in their yellow livery.

The other member of the Scottish Bus Group running into Perth is Eastern Scottish,which runs infrequent express services.Their express route to Inverness is run jointly with Highland Omnibuses,whose buses appear very infrequently

The only independent running into Perth is A.& C. McLennan,whose main depot and offices are at Spittalfield (a place which does not seem to be on any road map!)There are depots at Spitalfield,Perth,Stanley,Erral and Blairgowrie.The fleet has a definite Leyland bias,but bodywork is extremely varied.The fleet comprises ex.Ribble Leyland Olympics,ex.London RTL's,an ex.Northern General Guy,an ex.Reading Regent III,an ex.Birmingham Tiger TD6C as well as many others carrying their own bodywork.The livery is a well kept white with blue relief.

Continued on Page 12.


LONDON TROLLEYBUS MAP.
Numbers indicate stages (1-14) at which each route was closed.
Uxbridge
Hayes
Hounslow
Southall
Isleworth
Fulwell
Hampton Court
Dittons
Twickenham
Teddington
Brentford
Hanwell
Sudbury
Ealing
Wembley
Canons Park
Kingston
Tollworth
Acton
Craven Park
Hendon
Malden Raynes Pk.
Hammersmith
Harlesden
Cricklewood
Shepherds Bush
Golders Green
Putney
Barnet
Wimbledon
Wandsworth
Paddington
P.H.Fields
Finchley
Sutton
Hampstead
Highgate Village
Battersea
Clapham Junction
Tooting
Mitcham
Holloway
Wood Green
Winch Hil
West Croydon
Enfie
London Docks
Stamford Hill
Edmonton
Clapton
To Waltha Cross
West India Docks
Chingfor Mount
Bow
Leyton
Poplar
Charlton Works
Woodford
Victoria &Albert Docks
East Ham
South Woolwich
North Woolwich
Barking
Ilford
Barkingside
Crystal Palace
Penge
Welling
Abbey Wood
Chadwell Heath
Bexley Heath
Erith
Dartford
T-Tottenham Court Road(10)
B-Bloomsbury (4)
H-Holborn Loop(12)
S-Smithfield(10)
M-Moorgate(12)
L-Liverpool Street(11)
A-Aldgate(9)
W-Walthamstow(6)
WH-West Ham(6)
Z-Route closed 1950.

All the double-deckers have been fitted with platform doors by McLennan for passenger comfort on their long routes. Languishing in a field by the depot are two ex. Middlesborough PD1's with Roe bodywork, similar to that on 231.

To follow : Dundee, Aberdeen and Edinburgh.

BOOK REVIEW - by 'Monocoach'

"The Huddersfield Trolleybus System" by the Huddersfield Trolleybus Preservation Society 10" x 8". Duplicated sheets 20 pages 2/6d. 31, Woodhouse Avenue, Fartown, Huddersfield.

This booklet is the first publication of this Society, partly in aid of funds for Huddersfield Sunbeam 631. The cover is an unmistakeable yellow with a rather inexpert drawing of a Huddersfield Sunbeam. The text begins with a general description of the Huddersfield System, and a fairly accurate and clear map of routes. The rest of the booklet is concerned mainly with a description of routes, tackled in a novel and particularly useful manner. For each route a wiring map is provided noting all major alterations However, I believe there was originally a reverser at Marsden and the Rastrick reverser on the Brighouse route is incorrect. Also it is not clear whether the loop wiring in Ashbrow Road connecting routes 10 and 20 was or was not removed when these were extended to Brackenhall and Riddings resp. It should also be noted that there is now a direct connection from the southern exit of Longroyd Bridge depot to the Manchester Road wiring back to town. The last part of the publication is concerned with the vehicles operated. These are listed year by year. There are no notes of disposals and some of the abbreviations are a little unusual. The inside of the cover has an erratum and addendum.

On the whole a good publication covering previously untouched ground. It is a pity that the opportunity was not taken for better presentation on art paper and with photographs. Reasonable at 2/6d, and perhaps we may cherish the hope of a better presented successor.

We apologise for the delay in continuing the 'Britsh Tramway Systems' series - a further edition of this appears this month.

RAILLESS IN THE UNITED KINGDOM OF GREAT BRITAIN

by H.Brearley.

After the conception and application of railless on the Continent of Europe it was bound to spread.There were some early experiments in America,but I have never given much thought to these owing to difficulties in obtaining accurate information and the time taken to get replies to queries,but I have given much thought to this country.The earliest I have come across is a reference to Stroud in Gloucestershire who discussed Railless in 1903.Halifax in Yorkshire is said to have ordered a Schiemann bus in 1903 but I can find no reference to this in the Corporation minutes.In 1904 Mr.Horace Boot M.I.Mech.E. designed a trolleybus scheme for Tunbridge Wells as Consulting Engineer for the Borough.Quite a lot of his ideas were guess work as results of Railless working were almost unknown.In 1908 quite a number of towns in the country got the Railless fever and sent deputations abroad to study the various systems at work in Germany,France, Austria and Switzerland.The main idea of using Railless seemed to be not as a system in itself but as a feeder to the tramways already in existence.The deputations returned to report back to the various councils and photographs were brought back and shown in local newspapers in order to gain the public's confidence.I have studied some reports by permission of the Sheffield General Manager to 1961, Mr.R.C.Moore and can give some notes on the Sheffield report on November 10th 1908 - it was resolved that the General Manager,Mr.A.R.Fearnley prepare a report on railless traction as applied to the City of Sheffield.

In December 1908 it was decided to visit 'Mulhausen' in Germany and Vienna in Austria to inspect systems at work, and the deputation left this country on January 26th.1909. They arrived in Vienna on Jan 29th and were met by Herr Sprangler,Manager of the Viennatrams,and the Mercedes-Stoll system at 'Potzleindorf' was inspected.The cars were O.M.O. with two 20 h.p.motors on the back wheels.The controller was tram-type,3 brakes and run back sprags were fitted. The buses were 2½ tons each,cost £800,the overhead cost £1000 per kilometre(.62 miles) working expenses of a car working a 75 mile day was 4½d per car mile (The mileage run compares favourably with some of the mileage today on

split turns).

At Mulhausen they were met by Herr Hosli the City Engineer.The system was two kilometres long,worked by 4 cars on the Schiemann system.The cars seated 13 passengers, the motor drove the front axle and two Bowden brakes were fitted with one trolley boom with double head using metal skids.Total cost £3710 per mile of route.An extract from the 'Mulhausen Tagblatt' of Oct.21st.1908 showed the system a great success.The income was 12.75 pence per car mile,again favourable for the time.

A report was also given on the Italian Filovia System, nothing was said about the subsidy and the cost was said to be about 6½ per mile.

Sheffield decided they could run trolleybuses and were of the opinion the Cedes was best.Costs were compared between trams and the Cedes-Stoll,the latter overhead £3000 per mile,cars £600 each,trams £9000 per mile of single track and overhead.Sheffield did not adopt railless as we know,though they did have a trial with a Bradford car about 1913 at a tramway conference.

The West Riding or Bradford team covered much the same ground,but included the Lloyd Kohler system in Bremen,and the Bradford Manager Mr.C.J.Spencer reported to the council. Things were quiet for a time,as much red tape had to be cut before any development took place.The Parliamentary Committees were not keen,and thought these foreign ideas wild cat schemes,but before Bradford took a Bill to Parliament a railless car was demonstrated in London.This was on Sept.26th.1909 and was the Railless Traction Cos. system based on Schiemann's patents.The experiment took place at the Hendon depot of the Metropolitan Electric Tramways before members of the Municipal Tramways Association which was meeting in London.The bus was single-deck,seating 24 passengers,chain driven by two 22 h.p. B.T.H.motors.The body was built by Milnes Voss,and built for the RET Co.The current collector was a four-wheel trolley head on a turntable running under the wires,the head being supported by two booms.This was the patent of Mr.Munroe,engineer to the company.The test was a success but the car never ran in public service,but all this led to the railless being adopted in Great Britain.

Next month - the opeing of the Leeds and Bradford railless systems - the first trolleybus systems in this country.

S.L.T. - The axe falls. PART 2

By.P.J.Thompson.

And so to the last few days,during which 5 of the first batch of vehicles(including semi-unrebuilt 4) survived until the bitter end.My own last look at the system on 22nd.August - another wet and dull afternoon,typical of the weather which seemed to shroud that system,and with which the newcomer associates Manchester and the South Lancashire area in general.Soon there would be no more sights of the aged six-wheelers creeping across the dual-carriageway East Lancs Road,no more races with the Leigh-Manchester diesel through Worsley woods,and no more clack of trolleyheads and grotesquely undulating overhead wiring.For the otherwise unrecorded story of the last normal service,and its sequel the next morning I now quote the account of an Atherton friend,Mr.R.Boardman,who intrepidly braved the late hour with photographic equipment to immortalize the last runners.

SUNDAY 31st.AUGUST 1958,10.45 p.m.

Having spent much time during the day amending the flash-gun to take E.S.large type (old PF56) flashbulbs,and polishing and fitting special reflector (Kodaflector) the trek began when your scribe,and assistant carrying the baggage,wended their way to the Punch Bowl,200 yards away.

The first target was the 11 p.m. last service bus to Swinton (no.16 inscribed in chalk "Roll up for your last chance") on which a trial shot was made with the crew and an inspector."What paper will it be in,Mister?" "Police Gazette!" says Mister.Then came the 11.04 p.m. to Four Lane Ends.Here the flash failed for the front view,but its backside was caught as it turned from Wigan Road into Mealhouse Lane (no.69 one of the newest batch).

There were no people around to give it a special send off,and no other photographers.Then round came the last service bus out of Atherton: the 11.07 p.m. to Tyldesley (short on the Mosley Common service)(no.53 inscribed "Last Tyldesley").Here again the flash failed trouble was being experienced with a badly fitting co-ax plug in the camera sockett.We couldn't wait for a back view,as the assistant was holding up the bus for your scribe to join and make the round trip to Bomgs (-Tyldesley) and back. There were very few people on 53,but an inspector bobbed on for a last check.On the latter part of the journey we were the only passengers,so with the guard keeping a strict eye there was no chance of any souvenirs;anyway he

held the bus at the Punch Bowl while we got our pictures at 11.25 p.m.

Then came the wait for the last bus of the lot (service from Swinton) although later than that they were "ferrying" some from Swinton.As we were waiting the last from Four Lane Ends (no.69) came with a wreath slung on the front, with a notice "After much suffering patiently borne" and in chalk on the dash,"Last to Four Lane Ends." (photographed in depot the next day).Then finally the last one,no.11,at 11.40 p.m.,with quite a gathering of crews and inspectors for the picture - and away it shot down Leigh Road.

MONDAY 1st.SEPTEMBER 1968

Minus flashgun and assistant,your scribe travelled from Punch Bowl to depot on one of the new 73-seat Guys,now doing Bolton-Leigh service 82.The conductress said they had not had their sticks off yet that morning.

In contrast to last night,there was quite a crowd at the depot,and nearly everybody with cameras.Parked outside the shed was no.71,newly¾painted and spruced up ready for the trip to Leigh of Officials and civic dignitaries. Nearby was a brand new Guy delivered on the Thursday,which was to accompany the trolleybus.There was open access to the shed,so a good look round was had at the corpses.Then out from the office cocktails piled the tribe,posed for photographs,embarked,and away they went with a specially printed souvenir booklet and ticket.

Finding a friend with a car we gave chase and followed to the terminus,Spinning Jenny St.Leigh,where all the VIPs transferredcto the diesel and buzzed off to Wigan for a feed.The trolley (with "THE LAST" in the desty-box) was then thorwn open,and your scribe embarked for the FINAL trip.They were giving the kids their bus fare to bring them back to Leigh;15 passengers were standing on the lower deck,the stairs were all occupied and it was not ascertained how many were on top!We were cheered all the way along the route,and no.71 bravely stood the strain. Back at the depot,more photographs,and the final one with 71 in the mortuary.

The reference to "ferrying" trolleys from Swinton to Atherton is referred to in the Bolton Evening News of 1st. September 1958,which gives no.28 as arriving at 12.40 a.m. at Atherton depot on trade plates (the road find licence having run out at midnight) and is inscribed "The last to Atherton,with compliments of Swinton"

The SLT was all things to all people.The locals in many cases weren't sorry to see them go,alas because they compared them with glossy new buses then replacing the elderly LUT rolling stock.The trolleys were the electrical heritage of LUT's longest-serving General Manager (E.H.Edwards 1910-55) whose successor,C.C.Oakham(ex. Manchester CTD Chief Engineer) presided over the abandonment.

Even younger bus enthusiasts at the time had scant regard for these rattling ancients,but for me they represented what could be done with careful maintenance to get a long life out of a trolleybus system.But by 1958 most of the fixed equipment needed renewing,yet the system as a whole (which was dealt a blow by Electricity nationalization whereby SLT had to buy power from the generators in their own depot yard) all had a good innings and survived into the age of the Atlantean and space satellite,to give many exhilarating rides,and be remembered and recorded by grateful enthusiasts then just old enough to benefit from the growth of todays age of "mass-photography".

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TROLLEYBUSES OF THE SOUTH London Section B

(by H.Woolford)

FLEET LIST.

No.	Class	Chassis	Body	Type	Notes
1-35	A1	A.E.C.	United Construction Company	H56R	the Diddlers (see text)
36-60	A2	A.E.C.	U.C.C.	"	as above
61	X1	A.E.C.	London General Omnibus Co.	H74C	Last trolley for L.U.T.
62	X2	A.E.C.	M.C.W.	H70R	
63	X3	A.E.C.	English Electric	H70R	Only 4-wheel trolleybus
64-131	B1	Leyland	Brush,Birmingham Railway,Carriage & Wagon Company	H60R	Short buses used on hilly routes
132-183	C1	A.E.C.	M.C.W.	H70R	
184-283	C2	A.E.C.	M.C.W.	H70R	
284-383	C3	A.E.C.	Birmingham R.C.W.Co.	H70R	
384	D1	Leyland	Leyland	H70R	
385-483	D2	Leyland	Leyland	H70R	

484-488	B3	Leyland	Brush Birmingham RCW	H60R Short type(as class B1)
489-553	B2	Leyland	Birmingham RCW	H60R as B3
554-603	E1	AEC	Brush	H70R
604-628	E2	AEC	Park Royal	H70R
629-653	E3	AEC	MCW	H70R
654-753	F1	Leyland	MCW	H70R
754	X4	AEC	London Transport	H70D experimental dual entrance/exit trolley.
755-904	H1	Leyland	MCW	H70R
905-952	J1	AEC	MCW	H70R
953	L1	AEC	MCW	H70R
954	L2	AEC	MCW	H70R
955-1029	J2	AEC	MCW	H70R
1030-1054	J3	AEC	Birmingham RCW	H70R
1055-1153	K1	Leyland	Leyland	H70R
1154-1253	K2	Leyland	Leyland	H70R
1254-1304	K1	Leyland	Leyland	H70R
1305-1354	K2	Leyland	Leyland	H70R
1355-1369	L1	AEC	MCW	H70R
1370-1378	L2	AEC	MCW	H70R
1379	X5	AEC	London Transport	H70R Kingsway subway trolley, entrance on both sides at rear
1380-1529	L3	AEC	MCW	H70R
1530-1554	M1	AEC	London Transport	H70R
1555-1644	N1	AEC	Birmingham RCW	H70R
1646-1669	N2	AEC	Park Royal	H70R
1670	X6	AEC	English Electric	H70R
1671	X7	Leyland	Leyland	H70R 4-wheel steering
1672-1696	K3	Leyland	Leyland	H70R
1697-1721	P1	Leyland	MCW	H70R
1722-1733	SA1	Leyland	?	H70D These classes were
1734-1746	SA2	Leyland	?	H70D for South Africa
1747-1764	SA3	AEC	?	H70D but could not be shipped. Front entrance not used in London. They had 8 ft. wide bodies.
1765-1891	Q1	BUT 9611T	MCW	H70R

Next month - the end of the London System.

BRITISH TRAMWAY SYSTEMS - by.D.Tummon
2.Great Orme Railway.

Few will not have heard of the Gt.Orme Tramway,to give its original title.For the minority,this is a cable funicular which climbs the Great Orme headland at Llandudno.

The Act empowering the company to build the Tramway was passed duly in May 1898.However,problems caused by the gradient prevented construction beginning until 1901,at the bottom.The tramway was opened to the public on 31st. July 1902,but on the lower half only.The upper section was not opened until the 8th.July 1903.Since 1902 there has been no winter service.Operation continued fairly accident free until the 23rd.August 1932 when two people died as a result of car no.4 jumping the rails.The line reopened on 17th.May 1934.However the accident had caused the original company to go into liquidation,and the new owners renamed the tramway the "Gt.Orme Railway",to distinguish from the original company.Under the original Act,the Llandudno U.D.C. was empowered to compulsory purchase the tramway after 28 years and every 7 years thereafter.In accordance with this the Council took over in 1947.

Apart from the wagons(nos.1 to 3),running on the same principle as the passenger cars,there are only four vehicles.These were built in 1902/3 - nos.4 and 5 in 1902 and nos.6 and 7 in 1903.All were built by Hurst Nelson and look remarkably antique with open vestibules.The bulk-head windows are glazed,but not those on the sides.They are 37ft.long by 7ft.6ins wide.The seats are woodden double transverse for 48 arranged back-to-back in pairs.12 standees may be carried.The livery at present is light blue and cream.

The most interesting aspect of the tramway is that it is virtually unique in Europe,and peculiar in many details to Llandudno.The gauge is 3' 6",and the cables run in conduits in the centre.There are two lengths of cable on the lower section,to which the cars are permanently fixed in operation.The weight of the downward car helps to haul the other upwards.The overhead wire is merely for telephone contact from drivers to the cable operator,and is very similar to normal electrical overhead in appearance,though of lighter construction.At the halfway station the four cables revolve on four drums - the two for the bottom half turning together and the same with those of the top

half.Because of this,the loops on each section are not quite halfway as the cable winds quicker off a full drum of cable.It is perhaps best to describe the actual line by starting from the lower terminus - Victoria Station.The track starts singly from here,and it is the driver of the ascending tram who calls the driver of the descending tram at Halfway Station to see if he is ready to start.On receiving an affirmative reply,the lower driver presses his bell push twice.If there is a passenger for the request stop at Black Gate,a long and one short ring are given,and if for Tyn - y - Coed Rd. one short and one long,both before starting.The descending car gives no signals except emergency stops if necessary.To restart the ascending tram driver gives two rings.The descending car,of course,stops if the ascending one needs to,the stopping and starting being done by the engineer at the winding house.The line is single as far as the loop.Thereafter it is interlaced with the centre rails utilising the same gap - not a common centre rail as is often stated.The reason for not having single track is that there are always two cables moving in opposite directions in this area,and it would be impossible to have two cables in one conduit as these would foul each other.The track gauge is not wide enough to permit two conduits.Below the loop the ascending cable has left before the descending cable enters.Double track is unneccesary as cars only pass at the loop.The track continues thus to the Halfway Station and winding house.The lower section is completely paved for its 872 uards.The steepest gradient is an exceptional 1 in 4.

The upper section differs in several ways.The most obvious is that it is single-track completely,with one passing loop.Also the cable is in one length.This passes from the winding house via one tram,around a pulley at the summit and back via the other car to the winding house.The drawbars,holding the cable on the cars are mounted off-centre,so allowing single-track.The upper section of the line is 827 yards in length and of non-paved 'tramroad'.The points at the loop,except for gaps for the cables,are normal light railway type,and a car leaves the points set for its own return.The cables are open to view between the rails as are the pulleys.To start,the driver at Halfway terminus rings to see if the descending driver is ready.If so the starting signal is given.There are no intermediate signals,except for the emergency stop,the steepest gradient is 1 in 10.The line is just over 1 ml.long.svc every 20 mins.

Sheffield Standard Car No.173 enjoys a few moments standing time at Millhouses Loop before leaving for City and the East End.

Wolverhampton Sunbeam/Roe rebodied trolleybus no.451 at Fighting Cocks on the last day of the Wolverhampton System.